Nova’s Skeleton and Muscle Investigation

Learning objective: To identify that humans and some other animals have skeletons and muscles for support, protection, and movement.

Read each question carefully and use your knowledge of the human body to answer. Write your answers clearly in the spaces provided.

Nova the owl is learning all about how animals move and stay upright. Whether you are a human, a lion, or an owl, our bodies rely on a strong framework and clever muscles to work properly. Use what you have learned in class to complete this activity.

Word bank: skeleton · muscles · support · protection · movement · joint · skull · ribcage

1. Nova wants to know two main jobs of the human skeleton. Can you name them? (2 marks)

2. Which part of the skeleton acts like a helmet to provide protection for the brain? (1 mark)

3. Explain why muscles are needed for movement. What do they do to our bones? (2 marks)

4. Look at your own arm. What is the name of the place where two bones meet, which allows your arm to bend? (1 mark)

5. If a human did not have a skeleton, what do you think would happen to their body when they tried to stand up? Explain your reasoning. (3 marks)

Draw: Draw a diagram of a human arm. Label the bone and the muscle that helps the arm bend.

Extension challenge: Research one animal that does not have a skeleton (an invertebrate). Write two sentences explaining how it manages to move without bones.